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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules	)	CC Docket 94-102
to Ensure Compatibility with	)	RM-8143
Enhanced 911 Emergency Calling Systems	)	
	)	
Waivers for Handset-based Approaches	)	Public Notice
to Phase II Automatic Location	)	DA 98-2631
Identification Requirements	)	

PUBLIC SAFETY
ASSOCIATIONS' COMMENTS

The National Emergency Number Association ("NENA"), the Association of Public-Safety Communications Officials-International, Inc. ("APCO") and the National Association of State Nine One One Administrators ("NASNA"), hereafter "Public Safety Associations," submit these introductory comments on the Wireless Telecommunications Bureau's proposal to entertain waivers of the Phase II Automatic Location Identification ("ALI") requirements found at Section 20.18(e) of the Rules.[1]

[1] Public Notice, DA 98-2631, December 24, 1998, 64 Fed.Reg. 3478, January 22, 1999 ("Waiver Notice"). While the Bureau contemplates that waiver requests by February 4, 1999 would initiate the proceeding, the Public Safety Associations suggest that the features of conventional rulemaking – the overarching context of CC Docket 94-102, the possibility of general and permanent waivers, the "permit but disclose" treatment under the *ex parte* rules – justify these introductory comments.

Background. The Public Safety Associations have favored treating the ALI standards for wireless enhanced 9-1-1 ("E9-1-1") as likely to improve with evolving technology. We supported the 40-foot accuracy goal of the 1994 Joint Experts Meetings ("JEMs")[2] and proposed a similar target, 10 meters, in earlier comments in this docket. In our 1996 Consensus Agreement with the Cellular Telecommunications Industry Association ("CTIA"), we supported the "RMS" qualification as to reliability, and only reluctantly have concluded that use of Phase I ALI data as a fallback – in the event of Phase II failure on a given call – requires modification of the reliability measurement.[3]

Our concerns, however, have not been with accuracy and reliability alone. With CTIA, we agreed on a specific deadline – a date certain – when Phase II ALI would be available. By rule, that date has been set at October, 2001. As the Commission has acknowledged,[4] the feasibility of that uniform deadline was based on the expectation that radiolocation solutions would be "network-based" and would allow wireless callers to be located without

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[2] Report and Order, 11 FCC Rcd 18676, 18686 (1996).

[3] Letter on behalf of Wireless Enhanced 9-1-1 Implementation Ad Hoc ("WEIAD") to FCC Secretary, November 25, 1998, *ex parte* communication, CC Docket 94-102.

[4] Memorandum Opinion and Order, 12 FCC Rcd 22665, 22725 (1997), citing 11 FCC Rcd at 18732.

retrofitting or changing out their mobile handsets. This same expectation promised ubiquitous ALI service to all users having compatible air interfaces, whether calling within their home systems or "roaming."[5]

Thus, ubiquity, universality and affordability of ALI service – together with an evolution to improved accuracy and reliability – all are part of the Phase II background. The FCC never intended, however, to exclude handset approaches to these goals. 12 FCC Rcd at 22724-25.

Handset-based approaches. The U.S. Government-owned Global Positioning System ("GPS") of satellites is widely recognized to be capable of delivering greater radiolocation accuracy where handsets equipped for satellite communication have a relatively clear "view" of three or more satellites. Until recently, the ability of GPS-equipped handsets to provide prompt radiolocation accurately and reliably indoors, or in the shadow of man-made or natural obstructions, has been questioned. Some radiolocation vendors believe, however, that with the aid of intelligence external to the GPS-equipped handset, it will be possible to achieve good location fixes in

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[5] In the Waiver Notice (Note 1, *supra*), the Bureau explained that users whose home system is based on terrestrial radiolocation would not be able to access a foreign location system using satellites. By contrast, that same user could travel across and access all terrestrial location systems having compatible air interfaces.

even problematic environments. To this extent, the approach probably should be thought of as "handset-plus" or "network-aided."

As we understand these vendors' appeals to the Commission, they are concerned that they cannot meet the "all calls" feature of Section 20.18(e) as presently written, with its "flash cut" deadline of a single date. Ideally, they would like the rule revised so that its accuracy and reliability requirements could be met over whatever period of time they project as needed to sell GPS-equipped handsets and the external systems to support them. Barring a rule change, which the Commission says it is not prepared to endorse (Waiver Notice, 2-3), the advocates for handset-based approaches would like waivers.

Public safety concerns. The Bureau's waiver "guidelines" speak to most of the public interest goals that led to the current Phase II rule. They cover not only accuracy and reliability, but also ubiquity, universality and affordability of ALI beyond Phase I. Between the lines, however, the Public Safety Associations detect a tentative conclusion that universality of access and use – in both geographic and economic terms – can be compromised or given up in exchange for promises of earlier delivery of improved accuracy and reliability. We are not convinced that such a trade is in the public

interest. While our minds remain open, we intend to approach any waiver applications skeptically.

In the first place, it is not yet a foregone conclusion that the so-called handset approaches cannot be sold and implemented between now and October 2001. To the extent that vendors of these solutions, despite their late start, could be kept working diligently toward the existing deadline, we see that as a benefit to public safety and the public interest.

Second, even if the new approach requires more time to implement, we are not prepared to risk delay in the development of the more-proven terrestrial network solutions on the promise that something better is coming along. In telecommunications technology, something better is always coming along. We fear that the inescapable effect of waivers extending time for handset approaches will be to freeze or stall the development of network radiolocation solutions that we believe can be implemented at or ahead of deadline.

A "both-and" solution. The Public Safety Associations would prefer a "both-and" encouragement of diverse technologies rather than an "either-or" exclusionary solution. In the Further Notice of July 1996, the Commission proposed an ambitious "Phase III" radiolocation accuracy standard of 40 feet for 90% of calls processed, including a "z-axis" vertical dimension as well

as the x-y dimensions of longitude and latitude. That rule change, of course, remains pending. From our vantage today, however, it appears that handset-based approaches may be needed to meet such new standards. They should become part of an evolution, not an exclusion.

What happens to the terrestrial radiolocation facilities deployed for Phase II? If history is any guide, the present large embedded base of non-GPS handsets will be around for a long time. This means terrestrial radiolocation should have a prolonged useful life. Secondly, the Public Safety Associations invite the Commission and the industry to think about these Phase II terrestrial systems as the natural replacement for the backup that Phase I radiolocation will come to represent.[6] Just as Phase I is expected to become the fallback radiolocation method in the event of a Phase II data failure on a given call, so terrestrial systems could become the redundant safeguards for failure of satellite/handset Phase III data.

A word about procedure. The Public Safety Associations respectfuly suggest that the "permanent general waivers" forecast as one possible outcome of these proceedings are nothing more than rule changes by another name. If so, they should be subject to the conventional requirements for

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[6] As noted earlier, one reason for modifying the RMS reliability standard is to account for the use of gross Phase I radiolocation data in the event of Phase II failure.

rulemaking under the Administrative Procedure Act, 5 U.S.C. §551 et seq. As now formulated, we suggest the guidelines are not specific enough for that purpose. Moreover, while there is a pleading cycle for waivers, there is no absolute deadline for waiver filing.

Conclusion. As currently postured, the waiver guidelines risk freezing or delaying radiolocation solutions that can meet the October 2001 deadline and standards. They may well diminish the ubiquity and affordability of Phase II radiolocation. These risks can be avoided if the FCC and interested parties view handset-based approaches as a natural and complementary evolution of solutions that are available today and should be encouraged.

Respectfully submitted,

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